

CLAIMS (31551)

What is claimed is:

1. A method of wideband speech decoding, comprising:
 - (a) decoding a first portion of an input signal as a lowband speech signal;
 - (b) decoding a second portion of an input signal as a noise-modulated excitation of a linear prediction encoding wherein said noise modulated excitation is noise modulated by a portion of the results of said decoding as a lowband speech signal of preceding step (a) and adaptively smoothed; and
 - (c) combining the results of foregoing steps (a) and (b) to form a decoded wideband speech signal.
2. A wideband speech decoder, comprising:
 - (a) a first speech decoder with an input for encoded narrowband speech;
 - (b) a second speech decoder with an input for encoded highband speech and an input for the output of said first speech decoder, said second speech decoder using excitation of noise modulated by a portion of the output of said first speech decoder and adaptively smoothed; and
 - (c) a combiner for the outputs of said first and second speech decoders to output decoded wideband speech.